STANDARD HORIZON

Nothing takes to water like Standard Horizon

2013 Marine Communications Product Catalog



Our mission:

Our mission is quite simple, "Produce the finest Marine Communications in the market to meet the needs of Boaters everywhere". For more than 50 years, Standard Horizon has built and delivered the finest radios and GPS chartplotters on the market and that's why we can say...

"Nothing takes to water like Standard Horizon".







































































A FAMILY OF MARINE COMMUNICATIONS

A WIDE RANGE OF PRODUCTS TO SUIT YOUR NEEDS

HANDHELD VHF RADIOS

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GPS CHARTPLOTTER / FISH FINDERS

-

HANDHELD VHF RADIOS

DESIGNED SPECIFICALLY FOR USE IN HARSH MARINE ENVIRONMENTS





VITH LMR CHANNELS



Features:

- Submersible IPX8 (5 Ft or 1.5 m for 30 minutes)
- Selectable 5 or 1 Watt transmit power output
- Built-in True Noise Cancelling Microphone
- 40 Programmable Land Mobile Channels 134 MHz to 174 MHz with CTCSS and DCS signaling.
- · Programmable channel names
- · NOAA Weather channels and Weather Alert
- Low battery indicator
- Built-in Voice Scrambler for private communications
- Optional speaker microphones and headsets available
- Supplied with 2400 mAh Li-lon battery, AC and DC rapid chargers and cradle
- · Programmable Scan, Priority Scan and Dual Watch
- Preset key used to recall up to 10 favorite channels.





- 40 Programmable Land Mobile Channels with CTCSS and DCS signaling
- · Speaker microphone jack
- Selectable 5/1 W transmit power output
- Submersible IPX7 (3.3 Ft or 1 m for 30 minutes)
- Supplied with 1400 mAh Ni-MH battery,
- alkaline battery tray, AC and DC chargers and cradle
- · Programmable Scan, Priority Scan and Dual Watch
- SOS Strobe Light
- · Heavy duty die-cast frame
- Voice Scrambler capable









- Submersible IPX7 (3.3 Ft or 1 m for 30 minutes)
- · More than 13 hours of battery life
- Selectable 5 and 1 Watt transmit power output
- · Supplied with 1650 mAh Lithium-ion battery, AC and DC chargers and charging cradle
- · Huge channel display
- Programmable Scan, Priority Scan and Dual Watch
- NOAA Weather channels and Weather Alert
- Low battery indicator
- Preset key used to recall up to 10 favorite channels.

ERCIAL GRADE MARINE HANDHELD VHF RADIOS

BUILT BY PROFESSIONALS FOR PROFESSIONALS





All the great features of the HX400IS, tested and certified Intrinsically Safe.

INTRINSICALLY SAFE INFORMATION:

The HX400IS, FNB-115LIIS Li-ION battery pack and optional MH-66p48 and CMP460

speaker microphones meet the ANSI/UL 913-5th Ed. Requirements for: Class I:

Flammable Gases, Vapors, or Liquids Div. 1

Group A (Acetylene) Group B (Hydrogen) Group C (Ethylene) Group D (Propane)

Class II: Combustible Dusts Div. 1

Group E (Metals) Group F (Coal) Group G (Grain)

Class III: Ignitable Fibers and flyings



HX370SAS



All the great features of the HX370S in an intrinsically safe housing.

INTRINSICALLY SAFE INFORMATION:

The HX370SAS, FNB-V57AIS 1250 mAh Ni-MH battery pack, optional CMP460 speaker microphone and FVP-31 voice scrambler meet the ANSI/UL 913-5th Ed.

Requirements for: Class I:

Flammable Gases, Vapors, or Liquids Div. 1 Group A (Acetylene) Group B (Hydrogen).

Group C (Ethylene) Group D (Propane)

Class II: Combustible Dusts Div. 1

Group E (Metals) Group F (Coal) Group G (Grain)

Class III: Ignitable Fibers and flyings

FLOATING HANDHELD VHF RADIOS

LEADING THE INDUSTRY WITH THE FIRST FLOATING VHF WITH GPS



6





Features:

- Floating
- Submersible IPX7 (3.3 Ft or 1 m for 30 minutes)
- Built-in 12 Channel GPS Receiver
- . Luminescent Glow in the Dark gasket
- · Waypoint entry (200 waypoints) and navigation
- Navigate to DSC Position Request call
- 6 Watt Transmit power
- DSC functions include: Distress call with position, All ships, Urgency, Safety, Individual call, Position Request, Position Report and Group call
- · Programmable Scan, Priority Scan and Dual Watch
- Battery life indication
- · Preset key used to recall up to 10 favorite channels
- · Water activated SOS Strobe light
- NOAA Weather channels and Weather Alert
- 700 mW Loud speaker audio
- Selectable Power Output 6/5/2.5/1 Watt
- Supplied with 1380 mAh Li-Ion battery,







Features:

- Floating
- Submersible IPX8 (5 Ft or 1.5 m for 30 minutes)
- . 5 Watt Transmit power
- Unique USB charging system
- E2O (Easy To Operate) menu system
- Volume & Squelch indication display
- · Water enabled light, when dropped into the water
- Preset key (Maximum 10 channels)
- · Preset channel scan function
- . 600 mW loud internal speaker audio
- NOAA Weather Channels
- · Programmable Scan, Priority Scan, Dual Watch and Triple Watch
- Supplied with 1560 mAh 3.7V Li-lon battery, AC USB type charger and cable



HX290



Features:

- Floating
- Submersible IPX8 (5 Ft or 1.5 m for 30 minutes)
- · Glow-In-The-Dark strip
- · Selectable 5 and 1 Watt transmit power output
- Huge channel display
- · Optional Speaker microphone or Headset capable
- · Programmable Scan, Priority Scan and Dual Watch
- NOAA Weather channels and Weather Alert
- Key lock
- Low battery indicator
- · Preset key used to recall up to 10 favorite channels
- · Supplied with 1170 mAh Li-lon battery, AC and DC chargers and cradle





Features:

- · Two Transceivers included
- Submersible IPX7
- (3.3 Ft or 1 m for 30 minutes)
- · Slim, form fitting case design
- . More than 7.5 hours of battery life
- E2O (Easy To Operate) menu system
- · Selectable 2.5 and 1 Watt transmit power output
- Large channel display
- 500 mW loud internal speaker audio
- All USA, International and Canadian Marine Channels
- · Programmable Scan, Priority Scan and Dual Watch
- NOAA Weather channels and Weather Alert
- · Squelch level on display
- Battery life indicator
- Key lock
- Supplied with a 700 mAh Ni-MH battery, 110 VAC and twin charging cradle



HX150 NEW FOR 2013



- Submersible IPX7 (3,3 Ft or 1 m for 30 minutes)
- · Slim, form fitting case design
- 10 hours of battery life
- E20 (Easy To Operate) menu system
- Selectable 5 and 1 Watt transmit power output
- Large channel display
- 500 mW loud internal speaker audio
- · All USA, International and Canadian Marine Channels
- · Programmable Scan, Priority Scan and Dual Watch
- NOAA Weather channels and Weather Alert
- · Squelch level on display
- · Battery life indicator
- Key lock
- Supplied with a 1030 mAh Li-lon battery, 110 VAC and charging cradle

HANDHELD VHF ACCESSORIES

THE ACCESSORIES YOU NEED!

FNB-121LI 1380 mAh Li-Ion battery



FBA-38 Alkaline battery tray (AAA type cell x 5)



FNB-115LI 2400 mAh Li-Ion battery



MH-66048 Speaker Microphone



MH-73A4B Speaker Microphone



E-DC-19A 12VDC cigarette lighter charger



PA-48B 110VAC Wall Charger



CD-56 Twin Charging cradle



VC-24 Headset with VOX



FVP-31 Scrambler board



	HANDHELD VHF ACCESSORIES										
MODEL	Description	HX851	HX400	HX400IS*	1003705	HX370SAS*	HX300	HX290	HX280S	HX150	HX100
CAT460	VHF marine antenna	O	0	O	0	0	0	0	O	TINTO	(IATO)
CD-26	Charging cradle used with PA-48B/C		·	v	ő	0	0				
CD-38	NMEA Charging cradle used with PA-48B/C	0				,					
CD-46	Charging cradle used with PA-48B/C								0		
CD-50	3-hour Charging cradle used with PA-45B/C		0	0							
CD-52	Charging cradle used with PA-48B/C							0			
CD-56	Twin Charging cradle										0
CD-57	Charging cradle									0	
CLIP-14	Belt clip				0	0				J	
CLIP-19	Belt clip	0				Ť					
CLIP-22	Belt clip		0	0			0	0			
CLIP-24	Beit clip									0	0
CMP460	Submersible speaker microphone (IS rated)*	0	0	0	0	0		0			
E-DC-6	12VDC cable	0			Ö	0		0	0	0	0
E-DC-19A	DC cable with cigarette lighter plug	0			0	0		0	0	0	0
E-DC-30	DC cable with cigarette lighter plug used with CD-50 only		0	O							
FBA-38	Alkaline battery tray	0									
FBA-40	Alkaline battery tray								0		
FBA-42	Alkaline battery tray		0					0			
FBA-44	Alkaline battery tray						0				
FNB-V57AIS	Intrinsically safe 1250 mAh Ni-MH battery					0					
FNB-83	1400 mAh Ni-MH battery				0						
FNB-V105LI	1650 mAh Lithium-ion battery								0		
FNB-V110LI	1170 mAh Lithium-ion battery							0			
FNB-115LI	2400 mAh Lithium-ion battery		0								
FNB-115LIIS	Intrinsically safe 2400 mAh Lithium-ion battery*			0							
FNB-121LI	1380 mAh Lithium-ion battery	0									
FNB-122LI	1560 mAh Lithium-ion battery						0				
FNB-124LI	1030 mAh Lithium-ion battery									0	
FNB-125	700 mAh Ni-MH battery										0
FVP-31	Scrambler 4 code				0	0					
LCC-370	Leather case				0	0					
LCC-530S	Leather case		Ö	0							
MCC-270	Nylon radio case				0	0					
MH-57A4B	Mini speaker microphone with earphone jack	Q	0		0			٥			
MH-66D4B	Submersible speaker microphone	0	0	Q	0	0		0			
MH-73A4B	Submersible speaker microphone	0	0		0			0			
PA-45B	110AC 3-hour charger used with CD-50		0	0							
PA-45C	240AC 3-hour charger used with CD-50		0	0							
PA-48B	110VAC charger used with CD-26/38/39/46/52/56/57	0			0	0		0	0	0	0
PA-48C	240VAC charger used with CD-26/38/39/46/52/56/57	0			0	0		0	0	0	0
PA-54B	110VAC USB Wall Charger						0				
PA-54C	240VAC USB Wall Charger						0				
VAC-370B	110VAC rapid charger				0	0					
VAC-370C	240VAC rapid charger				0	0					
VC-24	VOX headset	0	0		0			0			
VC-27	Earpiece/microphone	0	0		0			0			

PRODUCT SPECIFICATIONS

THE QUALITY YOU CAN COUNT ON

SUBMERSIBLE	HX400	HX400IS	HX370S/HX370SAS	HX280S
GENERAL				
Battery type / Capacity	Li-ion 2400 mAh	Li-ion 2400 mAh	Ni-MH 1400 mAh / Ni-MH 1250 mAh	Li-ion 1650 mAh
Input Voltage	74VDC	74VDC	72VDC	7.4 V DC
Current Drain	Standby: 50 mA	Standby: 50 mA	Standby: 40 mA	Standby: 50 mA
	Receive: 320 mA (MAX AF Output)	Receive: 320 mA (MAX AF Output)	Receive: 200 mA (MAX AF Output)	Receive; 320 mA (MAX AF Output)
	Transmit: 1.6 A / 0.8A	Transmit: 1.6 A / 0.8A	Transmit 1.4 A / 0.9 A / 0.5 A	Transmit 16 A / 0.7 A
	(5 W / 1 W)	(5 W / 1 W)	(5 W / 2.5 W / 1 W)	(5 W / 1 W)
Overall Dimensions	2.24"W x 5.24"H x 1.57"D (57W x 133H x 40D mm)	2.24"W x 5.24"H x 1.57"D (57W x 133H x 40D mm)	2.3"W x 4.7"H x 1.2"D (58W x 120H x 30.5D mm)	2.2"W x 5.3"H x 1.1"D (56W x 133H x 27 5D mm)
Weight	12.3 oz (350 g) (w/FNB-115Li, Beit Clip & Antenna)	12.3 oz (350 g) (w/FNB-115Li, Belt Clip & Antenna)	13.4 oz (380 g)(w/FNB-83, Beit Clip & Antenna)	10.9 oz (310 g)(w/FNB-V105Li, Belt Clip & Antenna
TRANSMITTER				
RF Output	5W/1W (@7.4V)	5 W / 1 W (@7.4 V)	5W/2.5W/1W(@7.2V)	5 W / 1 W (@7.4 V)
Conducted Spurious Emissions	-75 dBc Typical	-75 dBc Typical	At least -73 dBc Typical	-75 dBc Typical
Frequency Stability	±2.5 ppm (-22° F to +140° F)	±2.5 ppm (-22° F to +140° F)	±2.5 ppm (-22° F to +140" F)	±5 ppm (-4° F to +140° F)
FM Hum and Noise	40 dB	40 dB	40 dB	40 dB
RECEIVER				
Sensitivity (12 dB SINAD)	0.26 µV	0.25 µV	0.25 µV	0.25 µV
Selectivity	70 dB(25 kHz) / 60 dB(12 5 kHz)	70 dB(25 kHz) / 60 dB(12.5 kHz)	70 dB	70 dB
Audio Output	700 mW	700 mW	600 mW	700 mW
NMEA In/Out	+	-	-	+
7				
FLOATING	HX851	HX300	HX290	HX150/HX100
GENERAL				
Battery type / Capacity	Li-ion 1380 mAh	Li-ion 1560 mAh	Li-ion 1170 mAh	Li-ion 1030 mAh / Ni-MH 700 mAh
Input Voltage	7.4 V DC	3.7 V DC	7.4 V DC	4.8 V DC / 7.4 V DC
Current Drain	Standby, GPS On: 100 mA	Standby; 20 mA	Standby: 50 mA	Standby: 15 mA
	Standby, GPS Off; 60 mA			
	Receive: 330 mA (MAX AF Output)	Receive: 330 mA (Typical at MAX AF Output)	Receive: 320 mA (MAX AF Output)	Receive; 300 mA / 300 mA (MAX AF Output)
	Transmit: 16 A / 15 A / 1.0 A / 0.7 A	Transmit: 2.3 A / 0.9 A	Transmit: 1.6 A / 0.7 A	Transmit: HX150; 1.5 A / 0.7 A HX100; 1.1 A / 0.8 A

FLOATING		12 ars	6			
GENERAL						
Battery type / Capacity	Li-ion 1380 mAh		Li-ion 1560 mAh	Li-ion 1170 mAh	Li-ion 1030 mAh / Ni-MH 700 mAh	
Input Voltage	7.4 V DC		3.7 V DC	7.4 V DC	4.8 V DC / 7.4 V DC	
Current Drain	Standby, GPS On: 1	00 mA	Standby: 20 mA	Standby: 50 mA	Standby: 15 mA	
	Standby, GPS Off: 6	60 mA				
	Receive: 330 mA (f	MAX AF Output)	Receive: 330 mA (Typical at MAX AF Output)	Receive: 320 mA (MAX AF Output)	Receive; 300 mA / 300 mA (MAX AF Output)	
	Transmit: 16 A / 15 A / 1.0 A / 0.7 A		Transmit: 2.3 A / 0.9 A	Transmit: 1.6 A / 0.7 A	Transmit: HX150; 1.5 A / 0.7 A HX100; 1.1 A / 0.8 A	
	(6 W / 5	W / 2.5W / 1W)	(5 W / 1 W)	(5 W / 1 W)	(5 W / 1 W) (2.5 W / 1 W)	
Overall Dimensions	2,5"W x 5.6"H x 1.8	B"D (62.5W x 141.5H x 45D mm)	2.32" x 5.04" x 1.3" (59W x 128H x 33D mm)	2,2"W x 5.2"H x 1,7"D (57W x 133H x 44D mm)	2.4"W x 5.3"H x 1.5"D (62W x 135H x 38.50 mm)	
Weight	11.8 oz (335 g) (w/l	FNB-V121LI, Belt Clip & Antenna)	8.4 oz (240 g) (w/FNB-122L!, Belt Clip & Antenna)	10.9 oz (310 g) (w/FNB-110LI, Belt Clip & Antenna)	HX150: 8.3 oz (235 g) (w/FNB-124LI, Beit Clip & Antenna)	
					HX100: 8.6 oz (245 g) (w/FNB-125, Belt Clip & Antenna)	
TRANSMITTER						
RF Output	6W/5W/2.5W/	1 W (@7.4 V)	5W/1W (@3.7V)	5 W / 1 W (@7.4 V)	HX150: 5 W / 1 W (@7,4 V) HX100: 2,5 W / 1 W (@4,8 V)	
Conducted Spurious Emissions	-75 dBc Typical		-75 dBc Typical	-75 dBc Typical	-75 d8c Typical	
Frequency Stability	±10 ppm (-4" F to -	+140° F)	±5 ppm (-4° F to +140° F)	±10 ppm (-4° F to +140° F)	±5 ppm (-4° F to +140° F)	
FM Hum and Noise	40 dB		40 dB	40 dB	40 dB	
RECEIVER						
Sensitivity (12 dB SINAD)	0.25 µV		0.25 µV	0.25 µV	0.3 yV	
Selectivity	70 dB Typical		70 dB Typical	70 dB Typical	65 dB Typical	
Audio Output	700 mW		600 mW	700 mW	500 mW	
DSC Format	ITU-R M493-13		+	-	2	
NMEA In/Out	Output: GLL, GGA a	and RMC		4	-	
	Input: GLL, GGA, G	SA, GSV, DSC, DSE and RMC		-	-	
	HX851 GPS Spec	ifications				
	Channels	12 channels				
	Sensitivity	Less than -130 dBm				
	Time to First Fix	1 min Typical (@Cold Start)				
		40 sec Typical (@Warm Start)				
	Geodetic Datum	WIGSRA				

FIXED MOUNT VHF RADIOS

POWER, PERFORMANCE, RELIABILITY





BUILT-IN AIS

MATRIX AIS+

First Fixed Mount VHF With Built-In AIS receiver 30 W PA/FOG-RAM3 COMPATIBLE





Features:

- Integrated dual channel AIS (Automatic Identification System) receiver
- 4800 or 38400 NMEA baud rate selection, for plotters with 1 NMEA port
- · AIS target display: MMSI, Call Sign, Ship Name, BRG, DST, SOG and COG
- Meets ITU-RM493-13 Class D (Digital Selective Call)
- Call an AIS Class A or B AIS Ship with DSC*
- Programmable CPA or TCPA collision avoidance alarms*
- Submersible IPX7 (1 m/3.3 Ft for 30 minutes)
- 80dB Commercial grade receiver
- . DSC position request and report functions when connected to a compatible GPS chart plotter
- 30 Watt PA/Loud Hailer with preprogrammed fog signals and listen back
- ClearVoice noise canceling speaker microphone with channel selection and 16/9 key.
- GPS Compass, Waypoint and GPS status pages*
- Navigation (LAT/LON, Time, SOG and COG) information shown on display*
- · Enter, Save and Navigate to waypoints with Compass page
- Versatile user-programmable scanning, priority scan and Dual Watch
- Oversized rotary channel knob with push to enter, backlit display and keys
- Optional connection for RAM3 second station remote microphone with AIS display.
- Local/Distance attenuator
- Supplied with HC2000 Dust Cover

when connected to a GPS



GX2000

MATRIX market

FIXED MOUNT DSC VHF WITH AIS INPUT. 30 W PA/FOG-RAM3 COMPATIBLE



- · AIS (Automatic Identification System) receiver or transponder connection
- AIS target display: MMSI, Call Sign, Ship Name, BRG, DST, SOG and COG*1.2
- Contact AIS Ship with DSC*1,2
- CPA (Closest Point of Approach) Alarm*1,2

- 80dB Commercial grade receiver
- Class D DSC (Digital Selective Calling) with Individual, Group, All ship, Position Report, Request and Distress
- Meets ITU-RM493-13 Class D (Digital Selective Call)
- Local/Distance attenuator
- Enter, Save and Navigate to waypoints with Compass page*2
- Submersible IPX7 (3.3 Ft or 1 m for 30 minutes)
- ClearVoice noise canceling speaker microphone with channel selection and 16/9 key
- · Oversized rotary channel knob with push to enter, backlit display and keys
- 30 Watt PA/Loud Hailer with pre-programmed fog signals
- Capable of connecting an optional RAM3 second station remote microphone
- · Able to control all radio, DSC, Hailer and AIS (when connected) functions remotely with optional RAM3
- Intercom between radio and RAM3
- · Versatile user-programmable scanning, priority scan and Dual Watch
- Navigation (LAT/LON, SOG and COG) information shown on display*2
- Supplied with HC2000 Dust Cover
- *1 when connected to an optional AIS receiver or transponder
 *2 when connected to an optional GPS







First Fixed Mount VHF with BUILT-IN GPS!







Features:

- Fixed Mount VHF with BUILT-IN 12 channel GPS
- Ultra thin and compact rear case design (3.5" depth)
- Meets ITU-RM493-13 Class D (Digital Selective Call)
- Automatically poll the GPS position of up to 4 ships using DSC
- Enter, Save, and Navigation to Waypoint with Compass page
- GPS Compass display
- Navigation (LAT/LON, SOG, and COG) information shown on display
- Submersible IPX8 (5 Ft or 1.5 m for 30 minutes)
- Noise canceling microphone with channel UP/DOWN, 16/9 and H/L keys
- NOAA weather channel selection with alert
- Programmable Scan, Priority Scan, and Dual Watch
- Preset key (Maximum 10 channels)
- GPS repeating of position, SOG, COG and time
- Customizable channel names
- NMEA Input and Output GPS information when connected to another NMEA device
- Programmable soft keys
- · Capable of connecting to a Second Station RAM3 Remote Access Microphone
- Die-cast chassis

FIXED MOUNT VHF RADIOS

POWER, PERFORMANCE, RELIABILITY





GX1600

EXPLORER WOODAND

ULTRA COMPACT FIXED MOUNT DSC VHF-RAM3 COMPATIBLE



Also available in black





GX1200 INEW FOR 2013

ECLIPSE DSC+ muclasso

Fixed Mount Class D DSC VHF





Also available in black

Features:

- Ultra thin and compact rear case design (3.5" depth)
- Meets ITU-RM493-13 Class D (Digital Selective Call)
- Automatically poll the GPS position of up to 4 ships using DSC
- Enter, Save, and Navigation to waypoint with Compass page
- GPS Compass display
- Navigation (LAT/LON, SOG, and COG) information shown on display
- Submersible IPX8 (5 Ft or 1,5 m for 30 minutes)
- Noise canceling microphone with channel UP/DOWN, 16/9 and H/L keys
- NOAA weather channel selection with alert
- · Programmable Scan, Priority Scan, and Dual Watch
- NMEA Input and Output
- Programmable soft keys
- Capable of connecting to a Second Station RAM3 Remote Access Microphone
- Die-cast chassis
- * when connected to optional GPS

Features:

- · Affordable Ultra Compact Class D Fixed Mount VHF radio
- Replaces older Eclipse+, Eclipse DSC and Eclipse DSC+ Models
- Full dot matrix display
- User programmable soft keys for easy menu operation
- 16/9, H/L and channel up/down keys on the mic
- · DSC Distress, Individual, Group, All Ships, Position Request, Position Request and DSC Test Call
- Auto DSC channel change selection
- Submersible IPX7 (3.3 Ft or 1 m for 30 minutes)
- . GPS position and Time shown on display*
- · Programmable Scan, Priority Scan, and Dual Watch
- NOAA Weather Channels with Alert All USA, International and Canadian Marine Channels
- NMEA 0183 Input and Output
- Meets ITU-RM493-13 Class D (Digital Selective Call)
- Overall Dimension; 2,4" H x 6,1" W x 6,7" D • Flush Mount Cutout; 2.0" H x 5.2" W
- * when connected to optional GPS

COMMERCIAL GRADE MARINE VHF'S AND LOUD HAILER

BUILT BY PROFESSIONALS FOR PROFESSIONALS



Bluetooth*

GX5500S

QUANTUM INVELABBIL

FIXED MOUNT DSC VHF WITH ALPHANUMERIC KEYPAD, 30 W PA/FOG-RAM3 COMPATIBLE



- . Meets |TU-RM493-13 Class D (Digital Selective Call)
- 80 dB Commercial grade receiver
- Bluetooth® capable headset(Optional BTK-2 Kit)
- · Direct keypad entry of channels
- . 30 Watt PA, FOG, Bells and Whistles with listen back
- · Bass and Treble Audio Tone Control
- · Noise canceling speaker microphone
- · Large rotary knobs, and oversized display Second station capable with RAM3 or VH-310
- Front Panel microphone can be remoted
- to rear panel and extended to 20 feet using MEK-4
- · Features a large alpha numeric keypad



VLH-3000

30 W DUAL ZONE LOUD HAILER

Features:

- 30 Watt PA output
- · Forward and aft dual zone hailer with listen back
- Bells & whistles and 4 fog signals
- Noise canceling microphone
- · Easy push button control
- Loud internal speaker audio
- · Dual zone intercom capability with connection of up to 2 optional MLS-300i intercom speakers



FIXED MOUNT VHF ACCESSORIES

GET THE JOB DONE RIGHT, THE FIRST TIME

CMP30 RAM3



- Full functioning second station
 Submersible IPX7 3.3 Ft for 30 minutes
- Full dot matrix display
- Programmable soft keys for easy operation
- Supplied with 23 Ft of routing cable
- External audio speaker connection

240SW



- 5x8" Rectangular 4 Ohm 40 Watt PA/Hailing horn
- Compatible with GX2000 / GX2150 / GX5500S and VLH-3000

220SW



- 5" Round 4 Ohm 30 Watt PA/Hailing horn
- Compatible with GX2000 / GX2150 / GX5500S and VLH-3000

MEK-4



- Microphone extension kit
- Remote mic up to 20 Ft
- Compatible with GX5500S

MLS-300



- External loud speaker
 Available in black or white
 Bracket or flush mount
 5 Inch diameter
 4 Ohms

MLS-310



- 10 watt amplified speaker
- Available in black or white
- Bracket or flush mount
- 5 Inch diameter ON/OFF Volume control

MLS-300i



- Intercom speaker used with VLH-3000
- PTA (push to alert) button
 Available in black or white
- Bracket or flush mount
- 5 Inch diameter • 4 Ohms

BTK-2



- Wireless Bluetooth[®] headset
- Noise canceling boom mic
 Compatible with GX5500S
- PTT or VOX operation
- Volume and power buttons

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FIXED MOUNT VHF ACCESSORIES

	FIXED MICOINT VIIF ACCESSORIES									
MODEL	Description	QUANTUM GX5500S	MATRIX AIS+ GX2150	MATRIX GX2000	EXPLORER GPS GX1700	EXPLORER GX1600	ECLIPSE DSC + GX1200	VLH-3000		
BTK-2	Bluetooth® wireless headset kit	0								
СМР30В	Remote station microphone (Black)	O	0	O	0	0				
CMP30W	Remote station microphone (White)	0	0	0	0	0				
CT-100A	23-foot extension cable for CMP30/VH-310	0	0	0	0	0				
Q7000619A	External GPS antenna with 30Ft of cable	0	0	0	0	٥	0			
CVS2500A	Voice scrambler	0	0	0						
HC1100	Dust Cover						0			
HC1600	Dust Cover				0	0				
HC2000	Dust Cover		0	O						
MEK-4	Microphone Extension Kit (20')	0								
MLS-300	External speaker	0	0	0	0	0	0	0		
MLS-300i	Intercom speaker with push-to-alert							0		
MLS-310	External speaker with 10 W amplifier	0	0	O	0	0	0	0		
MMB-84	Flush mount bracket	0	0	0			0	0		
MMB-97	Flush mount bracket				0	0				
VH-310	Remote telephone style handset	0								
220SW	5" Round 4 Ohm 30 Watt PA/hailing horn	0	0	0				0		
240SW	5 x 8" Rectangular 4 Ohm 40Watt PA/hailing horn	0	0	0				0		

FIXED MOUNT SPECIFICATIONS

UNPARALLELED PERFORMANCE AT EVERY LEVEL

	GX5500S		GX2150/GX2000		VLH-3000
GENERAL				GENERAL	
nput Voitage	13 8 VDC + 20 %		13 8 v DC +20%	Input Voltage	13 8 VDC + 20 %
Current Drain	Standby: 0.5 A		Standby 0.55 A	PA Output	Two 30W (at 4 chm 10 % distortion)
	Receiver: 1.5A		Receiver 08 09A	IC Output	Two 4W (at 4phm 10 % distortion)
	Transmit, 5 0 A (HI)	, 1.5 A (Lo)	Transmit. 5 0 A (HI), 1.0 A (Lo;	Listen Back nput Level	2 mV
Overa Dimensions	3 5"H x 9.1"W x 5 9	3"D (90H x 230W x 150D mm)	3 1"H x 7 1"W x 6 3"D (80H x 180W x 160D mm)	AF Output	
Flush-Mount Dimensions	28"Hx81"Wx51	"D (72H x 205W x 130D mm)	2 6"H x 6 3"W x 5 9"D (65H x 16)W x 150D mm)	EXT SPK Output	More than 4 W (at 4 ohm 10 % distortion)
Weight	3 2 lbs (1 5 kg)		31/32 lbs (15 kg)	INT SPK Output	More than 2 W (at 8 ohm 10 % distortion)
PA/FOG Power Output	30 W with listen ba	ick	30 W with listen back / 30 W no listen back	Mic sensitivity	10 mV
TRANSMITTER				Drain current	8 A ,MAX) when Forward and Aft Horns are used
RF Output	25 W (Hi) 1 W (Lo)		25 W (Hi), 1 W (Lo)	Idle current	300mA
Conducted Spurious Emissions	80 dB (H), 66 dB (l	_0)	Less than 80 dBc (Hi). 66 dBc (Lo)	Operating temperature	4° F to +131° F
Frequency Stability	±5 ppm -4° F to +	140° F)	±3 ppm -4" F to +140" F)	Storage temperature	22° F to +158° F
FM Hum and Noise	50 dB		50 dB	Water integrity performance	IPX7 (3 ft for 30 min) for the front panel
RECEIVER (for Voice and DSC)				Overa, Dimensions	4.3"W x 71"H x 5.5"D (110W x 180H x 140D mm)
Sensitivity (12 dB SINAD)	0 3D JV		0 30 µV	Flush mount dimensions	3 6"W x 6 5"H x 4 5"D (92W x 165H x 115D mm)
Spurious and mage Rejection	80 dB		80 dB for Voice (75 dB for OSC)	Weight	3 bs († 4 kg)
intermodulation and Rejection	80 dB		80 dB for Voice (75 dB for DSC)	A	
Audio Output	45W		45W		
DSC Format	Class D TU-R M49	09.19	Class D TU-R M 493-13		
RECEIVER (for AIS)	Glasso 10-1 Hies	20-10	G1003 O 10-11 H1 432-13		
			0 5 µV *2		
Sensitivity					
Selectivity			Spurious and mage Rejection 70 dB *2	_	
			ntermodulation and Rejection 70 dB *2		
NMEA Input/Output					
NMEA-0183	nput, GLL, GGA RI	MC and GNS(4800 bps)	Input. GL., GGA, GNS. RMC, GSA*2 and GSV*2 (4890 or 38400 *2 bps		
	Output: DSC and D	SE:(4800 bps)	Output: DSC, DSE(4800 or 38400 *2 bps)		
NMEA 0183 HS			Output: VDM*2(38400 bps)	*2.002.00 mg	
		A Paris open.	GX1600	GX1200	
					,
GENERAL					,
GENERAL Bud Voltage	13 8 VDC +20 %				,
nput Vortage	13 8 VDC ±20 % Standby 0 45 A	Part over	13 8 VDC ±20 %	13.8 VDC ±20 %	,
	Standby 0 45 A	Part over	13 8 VDC ±20 % Standby 0 45 A	13.8 VDC ±20 % Standby 0.3 A	
nput Vortage	Standby 0 45 A Receive: 0.8 A	10.4(a)	13 8 VDC ±20 % Standby 0 45 A Receive 0.8 A	13 8 VDC ±20 % Standby 0 3 A Receiver 1 0 A	
nput Voitage Current Drain	Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi)		13 8 VDC ±20 % Standby 0 45 A Receive 0.8 A Transmit 5 0 A (Hi), 1.0 A (Lo)	13 8 VDC ±20 % Standby 0 3 A Receiver 1 0 A Transmit: 5 5 A (Hi), 1 5 A (Lo)	(ZOD mm)
nput Voitage Current Drain Overa Dimensions	Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi) 3 4"H x 5 9"W x 3	5"D (85H x 150W x 90D mm)	13 8 VDC ±20 % Standby 0 45 A Receive 0.8 A Transmit 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm)	13 8 VDC ±20 % Standby 0 3 A Receiver 1 0 A Transmit: 5 5 A (Hi), 1.5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60H x 155W x 1	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions	Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi) 3 4"H x 5 9"W x 3: 2 8"H x 5 4"W x 2.0		13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm)	13 8 vDC ±20 % Standby 0 3 A Receiver 1 0 A Transmit 5 5 A (Hi), 1.5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60H x 155W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions Weight	Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi) 3 4"H x 5 9"W x 3	5"D (85H x 150W x 90D mm)	13 8 VDC ±20 % Standby 0 45 A Receive 0.8 A Transmit 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm)	13 8 VDC ±20 % Standby 0 3 A Receiver 1 0 A Transmit: 5 5 A (Hi), 1.5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60H x 155W x 1	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output	Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi) 3 4"H x 5 9"W x 3: 2 8"H x 5 4"W x 2.0	5"D (85H x 150W x 90D mm)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm)	13 8 vDC ±20 % Standby 0 3 A Receiver 1 0 A Transmit 5 5 A (Hi), 1.5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60H x 155W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER	Standby 0.45 A Receive 0.8 A Transmit 5.0 A (Hi); 3.4"H x 5.9"W x 3.1 2.8"H x 5.4"W x 2.0 2.0 lbs (0.9 kg)	5"D (85H x 150W x 90D mm) 6"D (72H x 137W x 65D mm)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg)	13 8 VDC ±20 % Standby 0 3 A Receive: 1.0 A Transmit: 5 5 A (Hi), 1.5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60H x 155W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g)	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output	Standby 0.45 A Receive 0.8 A Transmit 5.0 A (Hi) 3.4" H x 5.9" W x 3.1 2.8" H x 5.4" W x 2.1 2.0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo)	5°D (85H x 150W x 90D mm) 6°D (72H x 137W x 65D mm)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg)	13 8 vDC ±20 % Standby 0 3 A Receive: 1.0 A Transmit: 5 5 A (Hi), 1.5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60H x 155W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g)	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions	Standby 0 45 A Receive 0.8 A Transmit 5 0 A (Hi) 3 4"H x 5 9"W x 3 I 2 8"H x 5 4"W x 2 I 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 d8c	5°D (85H x 150W; x 90D mm) 6°D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo)	13 8 VDC ±20 % Standby 0 3 A Receive: 1.0 A Transmit: 5 5 A (Hi), 1.6 A (Lo) 2 4"H x 6 1"W x 6 7"D (60 H x 155W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 dB (Hi), 66 dB (Lo)	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability	Standby 0.45 A Receive 0.8 A Transmit 5.0 A (Hi) 3.4" H x 5.9" W x 3.1 2.8" H x 5.4" W x 2.1 2.0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 d8c ±3.ppm -4" F to +	5°D (85H x 150W; x 90D mm) 6°D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo) ±3 ppm -4" F to ±140" F)	13 8 VDC ±20 % Standby 0 3 A Receive: 1.0 A Transmit: 5 5 A (Hi), 1.5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60H x 155W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 dB (Hi), 65 dB (Lo) +3 ppm { 4" F to +122" F}	
nput Vortage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability FM Hum and Noise	Standby 0 45 A Receive 0.8 A Transmit 5 0 A (Hi) 3 4"H x 5 9"W x 3 I 2 8"H x 5 4"W x 2 I 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 d8c	5°D (85H x 150W; x 90D mm) 6°D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo)	13 8 VDC ±20 % Standby 0 3 A Receive: 1.0 A Transmit: 5 5 A (Hi), 1.6 A (Lo) 2 4"H x 6 1"W x 6 7"D (60 H x 155W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 dB (Hi), 66 dB (Lo)	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability FM Hum and Noise RECEIVER (for Voice and DSC)	Standby 0.45 A Receive 0.8 A Transmit 5.0 A (Hi) 3.4" H x 5.9" W x 2.1 2.0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc ±3 ppm -4" F to + 50 dB	5°D (85H x 150W; x 90D mm) 6°D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo)	13 8 VDC ±20 % Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo) ±3 ppm -4" F to ±140" F) 50 dB	13 8 VDC ±20 % Standby 0 3 A Receive: 1.0 A Transmit 5 5 A (H), 1.5 A (Lo) 2 4*H × 6 1*W × 6 7*D (60 H × 155W × 1 2 0*H × 5.2*W × 5 5*D (51 × 131 × 140 2 0 bs (920 g) 25 W (H), 1 W (Lo) 80 dB (Hi), 65 dB (Lo) +3 ppm (4* F to +122* F) 50 dB	
nput Voitage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability FM Hum and Noise RECEIVER (for Voice and DSC) Sensitivity (12dB S NAD)	Standby 0.45 A Receive 0.8 A Transmit 5.0 A (Hi) 3.4" H x 5.9" W x 3.1 2.8" H x 5.4" W x 2.1 2.0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc ±3 ppm -4" F to + 50 dB	5°D (85H x 150W x 90D mm) 6°D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo)	13 8 VDC ±20 % Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo) ±3 ppm -4" F to ±140" F) 50 dB	13 8 VDC ±20 % Standby: 0 3 A Receive: 1 0 A Transmit: 5 5 A (Hi), 1 5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60 H x 155W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 dB (Hi), 65 dB (Lo) +3 ppm 1 4" F to +122" F) 50 dB 0 25 µV	
nput Vortage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability FM Hum and Noise RECEIVER (for Voice and DSC) Sensitivity (12dB S NAD) Spurious and mage Rejection	Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi) 3 4"H x 5 9"W x 3: 2 8"H x 5 4"W x 2. 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc ±3 ppm -4" F to + 50 dB 0 25 µV 80 dB for Voice (75	5"D (85H x 150W x 90D mm) 6"D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo) 140° F)	13 8 VDC ±20 % Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo) ±3 ppm -4" F to ±140" F) 50 dB 0 25 µV 80 dB for Voice (75 dB for DSC)	13 8 VDC ±20 % Standbyr 0 3 A Receive: 1 0 A Transmit 5 5 A (Hi), 1 5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60 H x 155 W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 dB (Hi), 66 dB (Lo) +3 ppm { 4" F to +122" F} 50 dB 0 25 µV 75 dB	
nput Vortage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability FM Hum and Noise RECEIVER (for Voice and DSC) Sensitivity (12dB S NAD) Spurious and mage Rejection intermodulation and Rejection	Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi) 3 4"H x 5 9"W x 3: 2 8"H x 5 4"W x 2. 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc ±3 ppm -4" F to + 50 dB 0 25 µV 80 dB for Voice (70 70 dB for Voice (70	5"D (85H x 150W x 90D mm) 6"D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo) 140° F)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo) ±3 ppm -4" F to ±140" F) 50 dB 0 25 µV 80 dB for Voice (75 dB for DSC) 70 dB for Voice (70 dB for DSC)	13 8 VDC ±20 % Standby 0 3 A Receive: 1 0 A Transmit 5 5 A (Hi), 1 5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60 H x 155 W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 d8 (Hi), 66 d8 (Lo) +3 ppm (4" F to +122" F) 50 d8 0 25 µV 75 d8 70 d8	
nput Vortage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability FM Hum and Noise RECEIVER (for Voice and DSC) Sensitivity (12dB S NAD) Spurious and mage Rejection intermodulation and Rejection Audio Output	Standby 0.45 A Receive 0.8 A Transmit: 5.0 A (Hi) 3.4" H x 5.9" W x 3.1 2.8" H x 5.4" W x 2.1 2.0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc ±3 ppm -4" F to + 50 dB 0.25 µV 80 dB for Voice (70 4.5W	5"D (85H x 150W x 90D mm) 6"D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo) 140° F) i dB far DSC)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 d8c (HI). 66 d8c (Lo) ±3 ppm -4" F to ±140" F) 50 dB 0 25 µV 80 dB for Voice (75 dB for DSC) 70 dB for Voice (70 dB for DSC) 4 5W	13 8 VDC ±20 % Standby 0 3 A Receive: 1 0 A Transmit 5 5 A (Hi), 1 5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60 H x 155 W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140) 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 dB (Hi), 66 dB (Lo) +3 ppm (4" F to +122" F) 50 dB 0 25 µV 75 dB 70 dB 4 5W	
nput Vortage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability FM Hum and Noise RECEIVER (for Voice and DSC) Sensitivity (12dB S NAD) Spurious and mage Rejection intermodulation and Rejection Audio Output DSC Format	Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi) 3 4"H x 5 9"W x 3: 2 8"H x 5 4"W x 2. 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc ±3 ppm -4" F to + 50 dB 0 25 µV 80 dB for Voice (70 70 dB for Voice (70	5"D (85H x 150W x 90D mm) 6"D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo) 140° F) i dB far DSC)	13 8 VDC ±20 % Standby 0 45 A Receive: 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo) ±3 ppm -4" F to ±140" F) 50 dB 0 25 µV 80 dB for Voice (75 dB for DSC) 70 dB for Voice (70 dB for DSC)	13 8 VDC ±20 % Standby 0 3 A Receive: 1 0 A Transmit 5 5 A (Hi), 1 5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60 H x 155 W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 d8 (Hi), 66 d8 (Lo) +3 ppm (4" F to +122" F) 50 d8 0 25 µV 75 d8 70 d8	
nput Vortage Current Drain Overa Dimensions Flush Mount Dimensions Weight PA/FOG Power Output TRANSMITTER RF Output Conducted Spurious Emissions Frequency Stability FM Hum and Noise RECEIVER (for Voice and DSC) Sensitivity (12dB S NAD) Spurious and mage Rejection intermedulation and Rejection Audio Output DSC Format NMEA Input/Output	Standby 0.45 A Receive 0.8 A Transmit: 5.0 A (Hi) 3.4" H x 5.9" W x 3.1 2.8" H x 5.4" W x 2.1 2.0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc ±3 ppm -4" F to + 50 dB 0.25 µV 80 dB for Voice (70 4.5W Class 0 ITU R M 49	5"D (85H x 150W x 90D mm) 6"D (72H x 137W x 65D mm) (Hi). 66 dBc (Lo) 140° F) i dB for DSC) dB for DSC)	13 8 VDC ±20 % Standby 0 45 A Receive 0.8 A Transmit: 5 0 A (Hi), 1.0 A (Lo) 3 3"H x 5 9"W x 3 5"D (85H x 150W x 90D mm) 2 8"H x 5 4"W x 3.5"D (72H x 137W x 90D mm) 2 0 lbs (0.9 kg) 25 W (Hi), 1 W (Lo) Less than 80 dBc (Hi). 66 dBc (Lo) ±3 ppm -4" F to ±140" F) 50 dB 0 25 µV 80 dB for Voice (75 dB for DSC) 70 dB for Voice (70 dB for DSC) 4 5W Class D ITU-R M 493 13	13 8 VDC ±20 % Standby 0 3 A Receive: 1 0 A Transmit 5 5 A (Hi), 1 5 A (Lo) 2 4"H x 6 1"W x 6 7"D (60 H x 155 W x 1 2 0"H x 5.2"W x 5 5"D (51 x 131 x 140) 2 0 bs (920 g) 25 W (Hi), 1 W (Lo) 80 dB (Hi), 66 dB (Lo) +3 ppm (4" F to +122" F) 50 dB 0 25 µV 75 dB 70 dB 4 5W	
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TOUCH SCREEN MULTIMEDIA CHARTPLOTTERS





CPN700i



GPM NOTE:

100 4 four high resolution wide screen touch screen display
100 1024 x 600 high resolution wide screen touch screen display
with auxiliary output to connect to your onboard stereo workly's use option keyboard and mouse

**Teb Browser and Media Player built-in
memory stick to watch movies, view pictures, or lieten to music

- curtography for viewing 3D, rester or vector charts WAAS GPS antenne with externel antenna connection
- and Radar capable Mitti (2) Video insula - Pour Picture display
- e video culou mondiae

- political incorporate and level leve







internet & Multimedia in your finger tipe

With built in Wi-Fi you can access the internet from any way.

With built in Wi-Fi you can access the internet from any way.

The way reply with a operation touch sensitive keyboard. If you press, connected any accessible USB port. For encound antertains in CPN Series has been designed with built in speakers, samply connect a USB month drive to watch movies, view pictures, or leten to music. For improved authority take advantage or me. onboard stereo speakers







GPS Status page

Highway page





C-MAP 4D - Customize the way you cruise, sail or fish today ... and tomorrow. C-MAP 4D is the only maritime chartplotting solution that lets you completely customize your digital navigation charts. You choose the content (MAX or 4D), and you choose when to purchase additional Value-Added-Data to enhance your boating or sailing experience.







2D/3D Satellite Overlay

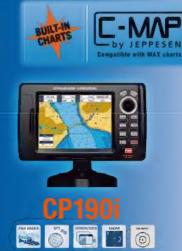
2D/3D Raster Overlays

GPS CHARTPLOTTERS









Features:

- CP190i: 5 inch 320x240 resolution display
- . CP390i: 7 inch 800x480 high resolution wide screen display
- . CP590: 12 inch 800x600 high resolution display
- Internal 50 channel GPS receiver with external GPS connection
- · Supplied with external 50 channel WAAS GPS antenna (CP590)
- Video input with Picture In Picture display (CP390i 1 input, CP590 2 inputs)
- VGA video output connects to an external monitor or compatible TV (CP590)
- C-MAP NT+ and C-MAP MAX cartography options
- · AIS, Fish Finder and Radar capable
- . Displays DSC Distress and Position report calls received from a DSC VHF radio
- . Dual chart window with independent zoom levels
- · Route Checking and Guardian Alarm
- · Supplied with a swivel bracket and flush mounting hardware

BUILT-IN CHARTS



GPS CHARTPLOTTER / FISH FINDER COMBOS











Fish Finder Features

- . Built-in 600 W Dual frequency Fish finder
- 50 and 200 kHz dual frequency selection
- Bottom Lock and White Line selections
- Sensitivity Time Control (STC) and Surface Noise Filter
 Speed through water (if available on transducer)
- · Alarms Shallow, Depth, Temp Upper and Lower

Features:

- CPF190i: 5 inch 320x240 resolution display
- . CPF390i: 7 inch 800x480 high resolution wide screen display
- Internal 50 channel WAAS GPS receiver and antenna
- · External 50 Channel WAAS GPS Smart antenna option
- Video input with Picture In Picture display (CPF390i 1 input)
- . C-MAP NT+ and C-MAP MAX cartography options
- · AIS, Fish Finder and Radar capable
- Dual chart window with independent zoom levels
- · Route Checking and Guardian Alarm
- · Supplied with a swivel bracket and flush mounting hardware



BUILT-IN CHARTS

Built-in detailed maps for coastal navigation of USA including Alaska, Hawaii and Great Lakes, Canada, Bahamas, Caribbean, Cuba, Mexico, Puerto Rico, and Central America



C-Map Max Optional Cartography

Bring your electronic charts to life with the ultimate navigator. You'll benefit from the most accurate chart detail, versatile features and a wealth of useful data.

GPS CHARTPLOTTER VHF ACCESSORIES

	GPS CHART PLOTTER ACCESSORIES									
MODEL	Description	CPN1010î	CPN700î	CP590	CP390î	CP190î	CPF390i	CPF190i		
ACAC10	Line Out Audio Adapter Cable	0	0							
ACVC10	Video Adapter Cable	0	0	0	0		0			
DST520A	600 W 2" Nylon Thru-Hull Depth/Temp	*	*	*	*	*	0	0		
DST521	600 W Transom Mount Depth/Speed/Temp	*	*	*	*	*	0	0		
DST523	600 W 2" Bronze Thru Hull Depth/Temp	*	*	*	*	*	0	0		
DST525	600 W In-Hull Depth Transducer	*	*	*	*	*	0	0		
DST526	600 W Bronze Thru Hull Depth/Speed/Temp with fairing block	W	*	*	*	*	0	0		
DST527	1000 W In-Hull Depth Transducer	*	*	*	*	*				
DST528A	1000 W Thru-Hull Depth/Temp with fairing block	W.	*	**	str	*				
FF525	Dual Frequency Black Box Fish Finder Module	0	0	0	0	0				
VGAC10	VGA Adapter Cable	0		0						
Q7000619A	50 Channel GPS NMEA Antenna with 30 Feet of routing cable	0	0	0	Option	Option	Option	Option		

*Can be used when FF525 is connected

FISHFINDER AND TRANSDUCERS



FF525 Black box fishfinder

· 50/200 kHz Dual frequency 600 W or 1000 W output

ower supply

10 - 35 VDC

; 1000 W;142 rnA at 12 VDC ; 600 W;100 mA at 12 VDC ; 1.42A at 12 Volt DC

Max current draw 1000W : 000/10 a) 12 : 600/1000 W (4800/8000 WPeak to Peak)

Power Output Display Colors : 256 and 16 color capable
DisplayVertical Resolution : 400 pixels on CP390i, CP590, CPV550, CPN700i and CPN1010i

: Dual 50 and 200 kHz 1000 W:1200 Ft (365 m) at 200 kHz; 4000 Ft (1219 m) at 50 kHz. 600 W;700 Ft (213 m) at 200 kHz; 1500 Ft (457 m) at 50 kHz

Min Depth Max Typical*

2.5 Ft (0.8 m) at 200 kHz; 5 Ft (1.6 m) at 50 kHz

1000 W:980 Ft (299 m) at 200 kHz; 2700 Ft (823 m) at 50 kHz 600 W:600 Ft (183 m) at 200 kHz; 1350 Ft (411 m) at 50 kHz

1000 W TRANSDUCERS

NMEA output sentences

Depth: DBT, DPT
Temperature: MTW
Speed (with DTS521 or DST526): VHW

operating temperature range: 32° F to 122° F (0° C to +50° C)

Dimensions: -4° F to 158° F (-20° C to -70° C) -4° F to 158° F (-20° C to +70° C) : 7.73"W x 1.96"H x 6.5"D (196.4W x 50H x 164.96D mm)

NOTE*

This is not a guaranteed specification. The actual maximum depth capability of the system depends on the type of transducer fitted, the reflectivity of the bottom, water condition, etc.



DST520 2" Nylon Thru-Hull Depth & Temp



Transom Mount. Depth, Speed & Temp



2" Bronze Thru-Hall Depth & Temp



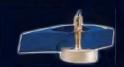
In-Hull Mount.



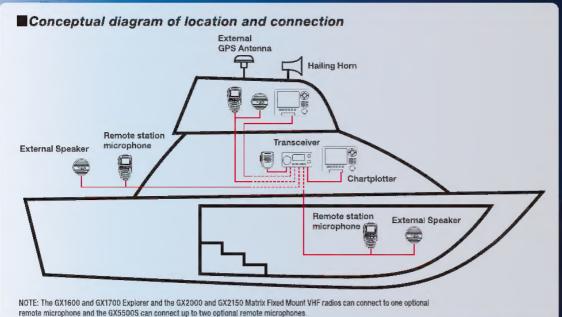
DST526 Bronze Thru-Hull, Triducer, Depth, Speed & Temp, with fairing block



DST527 in-Rull Mount. Depth



DST528A Thru-Hull, Long stem. Depth & Temp with fairing block





GPS CHARTPLOTTERS SPECIFICATIONS

UNPARALLELED PERFORMANCE AT EVERY LEVEL

Touch screen and Multimedia ChartPlotters							
	CPN1010i	CPN700i					
GENERAL							
input Voltage	10-35 VDC	10-35 VDC					
Current Drain	1.5 A	750 mA					
Display	10.1" bonded touch screen	7" banded touch screen					
	Sunlight viewable technology	Sunlight viewable technology					
Display Resolution	WSVGA 1024 x 600	WVGA 800 x 480					
Aspect Ration	16 x 9	16 x 9					
Brightness	1000 nits	1000 nits					
Contrast	500:1 contrast	250:1 contrast					
Cartography	built-in, optional C-Map 4D	built-in, optional C-Map 4D					
Operating Temperature Range	32° F to +131° F(0° C to +55° C)	32° F to +131° F(0° C to +55° C)					
Overall Dimensions	7.5"H x 12"W x 2.8"D	5.9"H x 9.3"W x 2.8"D					
Flush Mount Dimensions	6.8"H x 10.6"W	5.5"H x 8"W					
Weight (without bracket)	4.4 lbs	2.7 lbs					
User Points	Marks/waypoints 3000	Marks/waypoints 3000					
	Routes 50/100 points each	Routes 50/100 points each					
Track Points	10,000	10,000					
NMEA 0183 Out/in	RS232: 3/2, RS422: 2/2	RS232: 3/2, RS422: 2/2					
Imternal GPS Type	WAAS, 50 channel	WAAS, 50 channel					
Bluetooth®	Bluetooth® version 2,1	Bluetooth® version 2,1					
WIFI	802,11b/g(/n)	802.11b/g(/n)					
USB	On rear panel	On rear panel					
Low Level Audio Output	100 mV to 4 V	100 mV to 4 V					
Video	2 Violeo input NTSC/PAL with Picture in Picture / 1VGA output	1 Video input NTSC/PAL with Picture in Picture					



	CP590	CP390i	CP190i	CPF390i	CPF190i
GENERAL					
Input Voltage	10-35 VDC				
Current Drain	1.5 A max	750 mA max	520 mA max	2.3 A max	2.2 A max
Display	TFT Color LCD (Active area 12 °)	TFT Color LCD (Active area 7")	TFT Color LCD (Active area 5")	TFT Color LCD (Active area 7")	TFT Color LCD (Active area 5")
	Sunlight viewable 256-color	Sunlight viewable 256-color	Sunlight viewable 256-color	Sun viewable 256-Color	Sun viewable 256-Color
Display Resolution	800 x 600 pixels	800 x 480 pixels	320 x 240 píxels	800 x 480 pixels	320 x 240 pixels
Cartography	C-MAP NT+ / MAX C-Card	C-MAP NT+ / MAX C-Card	C -MAP NT+ / MAX C-Card	C-Map NT+ / Max C-Card	C-Map NT+ / Max C-Card
Operating Temperature Range	32° F to +131" F (0" C to +55" C)	32" F to +131° F (0" C to +55° C)	32" F to +131" F (0" C to +55" C)	32" F to + 131 " F (0" C to +55" C)	32° F to +131 ° F (0° C to +55° C)
Overall Dimensions	10.2"H x 15.4"W x 6.3"D	5.7"H x 9.9"W x 1.5"D	4.4"H x 7.1"W x 1.7"D	5.7"H x 9.9"W x 2.5"D	4.3"H x 7.1"W x 2.3"D
Flush Mount Dimensions	8"H x 10.8"W	4.3"H x 9"W	3.4"H x 6.5"W	4.25"H x 9"W	3.75"H x 6.5"W
Weight (without bracket)	6.6 lbs (3 kg)	2 lbs (920 g)	1.3 lbs (600 g)	2.5 lbs (1120 g)	1.7 lbs (780 g)
User Points	Marks/Waypoints 3000				
	Routes: 50 (max 100 Waypoints each)				
Track Points	10,000 (recordable in 20 tracks)				
NMEA 0183	5 Outputs and 4 inputs	5 Outputs and 4 Inputs	3 Outputs and 2 Inputs	3 Outputs and 3 inputs	2 Outputs and 1 input
Receiver Type	WAAS, 50 Channel				
Fish Finder Power Out				600W	600W
Dual Frequency				50 and 200 kHz	50 and 200 kHz
Depth Capability				2.5 Ft to 700 Ft at 200 kHz	2.5 Ft to 700 Ft at 200 kHz
				5 Ft to 1500 Ft at 50 kHz	5 Ft to 1500 Ft at 50 kHz



Standard Horizon reserves the right to make changes and enhancements to products at our discretion. Current specifications are therefore subject to change without notice.



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